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RAILROAD FREIGHT CAR SAFETY STANDARDS

Addition of Safety and Inspection Standards

Title 49—Transportation

CHAPTER II—FEDERAL RAILROAD ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

[Dockets RSFC–1, 2, and 3]

PART 215—RAILROAD FREIGHT CAR SAFETY STANDARDS

Addition of Safety and Inspection Standards

This amendment establishes a new Part 215 in Title 49 of the Code of Federal Regulations. Part 215 contains minimum Federal safety standards for railroad freight cars; including requirements in Subpart B for inspection of cars before they are operated; and the prohibition against and restrictions on use of certain equipment in Subpart J. This amendment responds to the need for safety standards as a result of larger, more complex freight cars which are operated at high speeds in longer trains, and which are often laden with hazardous materials.

New standards were proposed in three notices of proposed rulemaking. On September 22, 1972, the Federal Railroad Administration (FRA) issued a notice proposing to add Part 215 to the Code of Federal Regulations to establish railroad freight car safety standards and standards for freight car inspection (37 FR 19821, Docket No. RSFC–1). In addition to the standards proposed in that notice, on November 13, 1972, the FRA issued a notice (37 FR 24444, Docket No. RSFC–2) proposing to include requirements in Part 215 governing the lubrication of journal bearings and to revise, in part, the stenciling requirements proposed in Docket RSFC–1 in § 215.11. Also on November 13, 1972, the FRA issued a notice (37 FR 24445, Docket No. RSFC–3) proposing to include additional rules in Part 215 to prohibit the use of cars more than 50 years old and cars equipped with certain designs or types of components.

Interested persons were invited to participate in each of these rulemaking proceedings by submitting written comments on Docket RSFC–1 before December 1, 1972, and on Dockets RSFC–2 and RSFC–3 before January 15, 1973. In consideration of a request by the Association of American Railroads, the deadline for filing written comments with respect to Docket RSFC–1 was extended to January 14, 1973. In addition, public hearings were held on the proposed rules on January 23 and 24 and February 8, 1973, in Washington, D.C. Participants at the hearing on Docket RSFC–1 were permitted to file rebuttal statements by February 2, 1973. Participants at the hearings on Docket RSFC–1 were given until February 5, 1973, to file rebuttal statements. Participants at the hearing on Docket RSFC–2 could file rebuttal statements until February 20, 1973. The disposition of the most significant comments received is discussed hereafter.

The FRA anticipates that these new safety standards will reduce the number of railroad accidents caused by defective freight cars and will thereby reduce total accident costs to the industry. Contrary to the view expressed by some commenters, the FRA believes that the total costs which the new standards should reduce are appreciably greater than the expenses included in the monthly reports of accidents submitted to the FRA. Total costs related to a railroad accident are not incorporated in those reports. The accident reports normally include the dollar amount of estimated damage to equipment, track, and roadbed but not expenses such as overhead, cost of clearing the wreck, loss and damage to lading, or contingent expenses due to personal injuries.

Both the railroad industry and labor organizations participated in formulating the Railroad Freight Car Safety Standards. Their oral and written comments were of great assistance in making changes to the proposed standards, as discussed hereafter. The interest and comments expressed by all participants are appreciated by the FRA.

Because, as proposed in the notices, Part 215 is based primarily on the railroad industry's recommended standards, those proposed standards which would have provided for tolerances different from the industry's recommended limits have been changed in the final rules to the industry limits. FRA will consider modifying these rules when substantive safety data become available upon which less restrictive limits can be based. In this regard, several commenters suggested the establishment of tolerances for certain standards which were proposed without them, claiming that the industry recommendations are not strictly safety related. Those suggestions have not been adopted because supporting data is not available to justify the establishment of tolerances.

Numerous commenters recommended that certain defects be proscribed only at the time the particular component involved is disassembled on a repair track. The FRA is aware that many defects will be detected primarily on repair tracks. However, persons designated under § 215.15 to conduct inspections should be able to detect evidence of the existence of defects regardless of the location of an inspection. Therefore, the defects proscribed by Part 215 are not confined to discovery at any particular place.

With respect to Docket No. RSFC–2, some commenters objected to or would modify the proposed codification of industry standards on lubrication of journal bearings. As stated in the notice, many railroads have not followed the industry standards, as indicated by the large number of accidents caused by journal bearing failures. Furthermore, the need for codification of the industry's recommended standards is apparent because out of the fifteen accidents involving journal failures which FRA investigated during 1970–1973 three were caused by cars overdue for lubrication under the industry standards from 2 months to 3 years. The FRA issued a Journal Failure Report in October 1972, which indicated that certain geographic areas and certain carriers had a greater percentage of the journal bearing failures, even though the industry standards are intended to apply uniformly. The railroad with the worst record, based on freight car mileage, had 32 times the failure rate of the railroad with the best performance record. Concerning modification of the proposed periods for lubrication, the railroad industry conducted laboratory and service performance tests on extending its recommended lubrication periods. However, the increased failure rate which resulted dictated that the current periods, which FRA has adopted, be maintained. It appears that a disproportionately large number of plain journal bearings fail within a month after lubrication. FRA will monitor this situation closely and solicit information concerning this experience.

The FRA received comments from many railroads concerned that, because of their unique situations, the safety standards would be unduly burdensome. Even though the rules are intended to have general application, § 215.17 provides that exemptions may be granted. A railroad that believes that its special circumstances justify an exemption may apply under that section for a waiver from one or more of the requirements in Part 215.

After carefully considering all of the comments, both written and oral, a number of rules proposed in the notices have been substantively modified. Also, minor editorial changes have been made in some sections. The changes relating to Dockets RSFC–1 and RSFC–2 are discussed below by individual sections. Because the changes relating to Docket RSFC–3 involve significant structural changes in the regulations and in Appendix B, those changes are discussed separately under the heading "Docket RSFC–3." However, one change relating to Docket RSFC–3 involving stenciling is discussed below under § 215.11.

Section 215.1 A minor editorial change was made to this section by transferring a portion of the sentence to § 215.3(a).

Section 215.3 In this section reference to the October 1972 edition of "The Official Railway Equipment Register" has been deleted. The reference was included in the notice for the purpose of identifying railroad freight cars that would be covered by the regulations. Because the October 1972 edition is now out of print and later editions do not include all the cars classified by the 1972 edition, the "Equipment Register" was deemed inappropriate for incorporation by reference in the regulations.

The cars to which the regulations apply are now listed by their generic names under the definition of "railroad freight car" added to § 215.5. Any railroad freight car which is not described by one of the generic names would be covered by the regulations if it is "designed to carry freight or railroad personnel by rail" as stated in the definition.

The new definition of "railroad freight car" must not be interpreted as including certain maintenance of way equipment which was not included in the notice and not intended to be covered by Part 215. This equipment is specifically described under the heading General Service Maintenance of Way Equipment Cars in "The Official Railway Equipment Register." Notwithstanding exclusion of the

maintenance of way equipment for purposes of Part 215, a railroad freight car must comply with Part 215 when it is being used for maintenance of way purposes.

Several commenters stated that because Class V (ventilator) and Class Y (yard) cars have been eliminated from "The Official Railway Equipment Register" as of January 1, 1973, and now are used only in yard movements these cars should not be covered by the safety standards. The FRA considered this argument but believes that the number of accidents which occur in yard movements warrant application of the standards to the V and Y cards. In addition, the "Equipment Register" is a valuable reference for identifying types of freight cars, but its purposes are primarily related to cars in interchange. The FRA is concerned with the safety of all railroad freight car movements.

Section 215.5 A definition of "railroad freight car" has been added to this section. (See discussion under § 215.3, *supra*.) Also a definition of the word "break" has been added.

Several comments were received concerning the proposed definition of the word "reconditioned". Most of them concerned the possible interpretations of the terms "original condition" and "better than original condition", as included in the proposed definition. As a result, paragraph (c)(2) of § 215.5 has been rewritten to read "A physical and functional condition which is equivalent to or better than their original conditions." The wording has been changed to clarify the purpose of "reconditioned" as that of maintaining and improving the ability of a component to perform safely in service. The term "reconditioned" has been adopted in lieu of "rebuilt" because in the railroad industry the latter term has a meaning relating to accounting and depreciation matters in addition to the physical condition of a car.

Section 215.7 This section prescribes the duty of each railroad that knows, has notice, or should have known that a car which it operates has a component described as defective in Part 215. The railroad must remove the car from service, repair the car, or as provided in § 215.9, move the car to another location where it can be repaired. The phrase "should have known" has been added to the final rule to limit the defense of no knowledge in situations, for example, where an obvious defect is present within a short time after inspection, or where strong indications of a defect are ignored.

Section 215.9 Comments on this section generally favored the concept of movement of a defective car for repair after inspection by a qualified person. Several of the commenters preferred that a defective car be permitted to move to its destination. Other commenters objected to the proposed requirement for written notification of crew members of restrictions on movement of the defective car. The FRA considered all the comments but felt that allowing the movement of a defective car to its destination would not be a safe operating practice in all cases. Also, the requirement for written notification of all crew members on the train in which a defective car is moved is necessary to ensure that each member is aware of the defective car so as to minimize the risk of injury.

Section 215.11 In response to comments concerning the proposal in paragraph (a) that reporting marks and car numbers be stenciled in letters and numbers at least 3 inches high, the FRA adopted the current industry standard of 7-inch letters and numerals in the final rule. In making this change, the FRA felt that a 3-inch marking would have been too small for distant visibility of car numbers.

Several changes were made in paragraph (b) (now redesignated paragraph (c)) as a result of comments. The proposed stenciling requirements have been revised to permit the use of understandable abbreviations wherever possible; and for stenciling only a "month and year" in place of a complete "date." A new stenciling requirement has been added with respect to periodic inspections performed under § 215.25. This new requirement will enable each railroad to learn when a car is nearing its next periodic inspection date. It will also serve as the only recordkeeping requirement for inspection because the recordkeeping proposed under § 215.29 has been deleted as to onerous. Also new is the requirement for stenciling certain "high utilization" cars under paragraph (c)(6) of § 215.11. This is considered an essential means of identifying those "high utilization" cars permitted to be inspected at less frequent intervals under § 215.25(a). Examples of the stenciling required by § 215.11(c) are set forth in a new Appendix C.

There was some interest in making the stenciled markings visible both night and day through the use of reflective materials. The FRA does not consider it necessary to require reflective or luminescent materials for stenciling, although their use is not precluded by the rule and would facilitate visibility. Regardless of the method or material used for stenciling, the marking must be legible at all times. If markings are illegible, the car involved must be inspected or lubricated, as the case may be, as provided in paragraph (d). If the "high utilization" stenciling under paragraph (c)(6) is missing, incorrect, or illegible, then in accordance with § 215.25(a) the car involved may not be operated unless it meets the inspection requirements under § 215.25(a)(2).

As a result of comments received in Docket No. RSFC–3, a new requirement (designated as paragraph (b)) has been added to § 215.11 for additional stenciling immediately following the car number to highlight those cars whose operation is restricted under the new § 215.225. Marking the restricted cars is considered necessary for purposes of identification to ensure compliance with the operating restrictions. Also, many cars are subject to the restrictions because of components which are inconspicuous. These cars might go undetected by operating personnel but for an identifying marking on the car.

Section 215.13 This section in the notice has been redesignated as § 215.19.

Section 215.15 and 215.17 No changes were made in these sections.

Section 215.19 The requirements proposed in this section have been modified as discussed hereafter under the heading "Docket RSFC–3" and are now contained in a new Subpart J.

Section 215.29 The name of the inspection required by this section has been changed to "safety inspection" rather than "visual inspection," as proposed in the notice, to better reflect the purpose of the inspection and to permit the use of mechanical or electrical devices in addition to visual means in conducting the inspection. Substantively, each inspection must be carried out in accordance with instructions submitted for approval to the FRA before February 1, 1974 and approved by the Administrator. Because the June 30, 1973 date proposed in the notice for commencement of the inspections has passed, a new starting date has been set in paragraph (a) of § 215.23. Beginning on June 1, 1974, each railroad freight car in operation (loaded or empty) must be given a "safety inspection" by a qualified person designated under § 215.15 when the car is placed in a train. If a car is placed in a train at a location where a qualified person cannot make the inspection except where the train is originally made up, other available employees must inspect the car to ascertain whether or not it is in safe condition for movement. The car must then be given the required "safety inspection" at the next point where a qualified person is available. Cars must always be inspected by a qualified person where the train is originally made up. The notice would have required railroad freight cars to be inspected only at the initial terminal of a train, or where it is originally made up. The final rule has been broadened slightly to require the inspection of cars picked up en route after a train leaves its initial terminal.

Section 215.25 The periodic inspections proposed in this section generated numerous comments which have resulted in modification of the final rule. The notice provided that a car would have to be inspected initially during the first 7 years or 150,000 miles after it is built or reconditioned, and every 2 years or 50,000 miles thereafter. However, certain "high utilization" cars would have been inspected strictly on the mileage basis.

Several commenters overstated the expense of moving a railroad freight car to a repair track for the purpose of the periodic inspection requirement. Although recognizing there will be an expense involved, the FRA believes that periodic inspections required by this section may be scheduled to coincide with industry or other Federal requirements, and thereby realize a savings in the cost of inspection. For instance, some commenters indicated that a freight car is normally placed on a repair track an average of 3 or 4 times annually. If this is the case, there will be ample opportunity to control and limit the movement of freight

cars to repair tracks for purposes of periodic inspections.

Most commenters stated that mileage accounting procedures are not currently used to establish the number of miles operated per car, and pointed out the difficulties of monitoring inspections on a mileage basis. Various alternates were suggested such as basing the periodic inspection on wheel wear, making the inspection coincident with the air brake C.O.T. & S. Inspections, inspecting on a 5-year basis to match the usual repainting schedules, or taking advantage of other normal shopping periods. Much concern was expressed that inspection requirements as proposed would have a serious impact on car utilization and supply, with possible delay in movement of loaded cars. One commenter remarked that all cars could not be brought into compliance before the proposed deadline and that an inflexible deadline would require cars to be withdrawn from service pending inspection. Unsupported estimates of time loss for periodic inspections varied from 4 or 5 hours to 10 days.

The handling of cars of private car ownership and cars leased to other railroads or operators was addressed by many commenters. A question was raised as to the need for such cars to be returned to home shops (either of railroad or private car owners), with loss due to empty transit and prohibitive costs resulting from tariff schedules. Certain commenters assumed that the locations at which periodic inspections could be made would be severely limited because of the need for qualified inspection personnel.

Various examples of apparent excessive frequency of inspection that would be required by a 50,000 mile limit were stated. One group of "high utilization" unit train cars with approximately 158,000 miles per year operation was estimated as requiring inspection three times per year, while another group in similar service but used 90,000 miles per year would need only three inspections in two years. Another example was that a certain low mileage service would operate less than 7,200 miles per year and yet require periodic inspection every two years. One commenter argued that certain high mileage cars, such as unit train cars, were not exposed to the rigorous conditions of general service and did not need the same frequency of periodic inspection.

After considering the comments received regarding § 215.25, the section has been modified. The final rule provides that after December 31, 1976, each railroad freight car in service, other than a high utilization car, must have been inspected within the preceding 48 months, unless the car was built or reconditioned within the preceding 96 months. Each high utilization car must have been inspected within the previous 12 months, unless the car was built or reconditioned within the preceding 24 months. However, a high utilization car for which a railroad maintains mileage records to show that the car traveled less than 25,000 miles in the preceding 12 months, and which is stenciled under § 215.11(c)(6), may be inspected at the same intervals applicable to other than high utilization cars. The final rules defines a "high utilization car" as one that is equipped to carry trucks, automobiles, containers, trailers, or removable trailer bodies, or that is assigned to a train operating on a continuous round trip cycle. By June 1, 1974, each railroad must submit to the FRA for approval, a program to bring its freight cars into compliance with § 215.25(a).

Because of the absence of reliable information concerning useful mileage data, the frequency of the periodic inspection requirements have been established on a time basis. The time periods are related to an approximate mileage range for normal service. The time limits for other than high utilization cars are fixed to provide that new or reconditioned cars will be inspected within an initial 200,000 mile limit, and within an average 100,000 miles thereafter, assuming an annual car mileage of about 25,000 miles. The new time requirements should relieve the concern regarding excessive frequency of inspections.

FRA expects that freight cars which do not fall within the definition of a "high utilization car" in § 215.25(b) but which travels more than 25,000 miles annually, will be inspected at correspondingly more frequent intervals than are required by § 215.25(a)(1).

The Association of American Railroads (AAR) concept of inspecting freight cars whenever they are placed on repair tracks has considerable merit. FRA agrees that the more frequent inspections which would result in many instances would be desirable. Although FRA has not incorporated this concept in these standards, railroads are not precluded from adopting this as an industry-wide practice. FRA would welcome this development. However, all freight cars must receive the periodic inspections within the maximum intervals prescribed in § 215.25. Following the inspections under the requirements of § 215.27 the cars inspected must be restenciled accordingly to indicate the latest periodic inspection.

If it is assumed, as the AAR estimated, that a freight car receives repair track movement on the average of 3 or 4 times annually, their periodic inspection can be accomplished coincident with other normal maintenance. By taking advantage of normal repair track movements, the adverse effects on car utilization anticipated by some commenters should be minimized. It is expected that as inspection forces become familiar with requirements the estimated time out-of-service will be substantially reduced. Repair track facilities should be adequate for making all inspections; and there are more than 450 such facilities scattered throughout the Nation, in addition to the more complete repair shops. Also, shops which are not railroad owned should be able to perform the inspections. These shops, however, would have to cooperate with the related railroad managements in establishing qualifications of personnel as required by § 215.15. Railroads that accept cars inspected at privately owned or contract repair shops and place them in service are responsible for compliance of those cars with Part 215.

Section 215.27 This section has been modified by adding the word "couplers" in paragraph (b) of the section to the list of components included in a draft system. The few comments received relate to the high cost-benefit ratio anticipated if disassembly of components were necessary to comply with the inspection requirements of § 215.25, as well as the service and utilization losses mentioned under § 215.25, *supra*. The FRA has not specified in § 215.27 that suspension and draft systems be dismantled for the required inspections because present industry inspection practices are adequate without disassembly in most instances. Knowledge of the components involved by the qualified person conducting an inspection should be sufficient to determine when disassembly is necessary. If components are inspected and found to be functioning as intended, without indication of excessive wear or malfunction, disassembly should not be necessary. It may be, however, that some arrangements, such as draft gears, will require disassembly, but these instances should be minimal.

This section has also been modified to make it clear that the required examination determined whether the suspension and draft systems and listed components, comply with the requirements of Part 215.

Section 215.29 This section, which would have prescribed certain record-keeping requirements, has not been included in the regulations in view of the almost unanimous contention that it would impose an extremely expensive administrative burden on the railroads.

Section 215.31 This section in the notice has been redesignated as § 215.29 without change.

Section 215.33 This section in the notice has been redesignated as § 215.31 without change.

Section 215.43 Most commenters requested that the various limits proposed to establish wheel defects under this section be increased. However, supporting data were not furnished to justify increasing the limits in the final rule above those proposed. The established limits are based on present industry standards and requirements of the Locomotive Inspection Regulations (49 CFR Part 230). The FRA accident reports and investigations indicate that the limits should not be changed.

A minor editorial change was made in paragraph (i) of § 215.43. Several commenters recommended that the word "continuous" be substituted for "contiguous" because the former is present industry terminology and well understood. To clarify any misunderstanding, the word "adjoining" has been added in parentheses following "contiguous."

One commenter recommended that paragraph (p) of § 215.43 be deleted because coloration is not a satisfactory indicator of overheating and that presently there is no adequate indicator. Nevertheless, coloration has been used for years by the railroad industry and is currently recommended by the Association of

American Railroads. Until a more adequate method is developed, the FRA has adopted the coloration test as the most practical safety standard.

Section 215.55 In response to one comment, the "damage" which would render a journal defective, as originally proposed in subdivision (b), has been more explicitly stated in the final rule in terms of the type of damage.

Paragraph (d) of this section has been deleted as suggested by several commenters. In this paragraph (p) it was proposed that any journal stamped with the mark "RJ" would be considered defective. Commenters pointed out that failures normally occur on axles marked "RJ" in a relatively short time after reconditioning, and all the "RJ" axles in service now have been in service for seven years and will be removed by 1976. The FRA accident records indicate, however, that these axles are continuing to fail. Consequently, the proposal in paragraph (d) of this section to consider journals stamped "RJ" as defective has been modified and transposed to Section I of Appendix B in the list of prohibited railroad freight car components.

Section 215.83 One commenter was confused by the FRA's use of the word "journal" to refer to the type of bearing commonly called "friction," "brass," or "plain." In recent years, for clarity, most publications have used the term "plain bearing." Therefore, to distinguish between the two types of journal bearings, the FRA has adopted the terms "plain bearing" and "roller bearing."

Changes were made to paragraphs (a), (b), and (c) of this section. Paragraph (a) now provides that a plain bearing box must have some free oil. The proposal that it must have at least one-fourth inch of oil was based on proper maintenance practices. The FRA decided, however, that the proposal was unrealistic from a safety standpoint. Paragraph (b) has been rewritten to reflect comments pointing out that a box lid must be closed to perform its intended function. Finally, in paragraph (c), the specifically named contaminants originally set forth were changed to the more general provision that the box cannot contain any foreign matter which has a detrimental effect on the lubricant.

Sections 215.85 and 215.87 No substantive changes were made in these sections.

Section 215.89 Paragraph (b)(3) in the notice was deleted from the final rule because several commenters pointed out that other methods to determine overheating listed in paragraph (b) are more accurate, and that conditions other than overheating sometimes cause the journal to have a blue color. Also, in this section the wear limits on the plain bearings have been changed to correspond to the industry standards. A sketch indicating the condemning dimensions have been added to the final rule.

Section 215.91 The wear limits proposed for the wedges have been changed to correspond to the industry's recommended standards.

Section 215.93 Several commenters contended that paragraph (a) would be too restrictive and that an exception should be provided for minor yard derailments. The FRA's records indicate that even in a minor yard derailment the outer ring and cage of a roller bearing can be damaged by the initial impact of the wheel contacting the road bed. Therefore, no change has been made in the final rule.

In paragraph (b)(1), the methods specified in the notice for determining overheating in excess of 200° F were deleted as unnecessary.

Several commenters felt that the requirement in paragraph (b)(2) condemning a roller bearing for a "loose or missing cap screw" would be too restrictive. Apparently, they confused the proposal with the industry practice of disassembling, inspecting, and repairing a bearing when two or more cap screws are missing. Paragraph (b)(2) does not require an inspection similar to paragraph (a) of this section. It only requires that the defect be corrected.

In response to several commenters the word "loose" has been deleted from paragraph (b)(4) of § 215.93. The FRA agrees that a side frame key can be loose and still perform its function. Several commenters felt that the truck side frame key had no connection with the performance of the roller bearing. The purpose of the key is to retain the wheel, axle, bearing, and adapter assembly in their normal positions when the truck side frame lifts in service. If these components are not retained in position, critical defects can develop.

Paragraph (b)(6) of § 215.93 has been deleted in response to one comment indicating that a fresh accumulation of grease, as described in that paragraph, would be an indicator of a nonfunctioning seal which would be proscribed under paragraph (b)(5).

Section 215.95 One commenter suggested that paragraph (b) be modified to take into account markings on the seal assembly caused by a bearing of the wrong size. The suggestion has not been adopted because the language in paragraph (b) specifies that an adapter is defective only when the adapter is "marking the seal assembly." Marking is a sign that the adapter may be defective. The exact cause of the marking must be determined by inspection.

In response to some commenters, Figure 8 has been added to clarify the defect described in paragraph (c) of § 215.95.

Paragraph (d), of § 215.95 proposed in the notice, has been deleted as redundant for purposes of safety.

Paragraph (e) of § 215.95 in the notice has been redesignated as paragraph (d). With respect to this subdivision, one commenter requested that the proposed .025 inch limit for wear on the thrust shoulder of narrow adapters be changed to .050 inch. This request was not supported by data to justify an increase in the wear limit. The FRA believes that the proposed limit is a critical dimension with respect to bearing failure, and no change has been made in the final rule. Because wear usually occurs on the outer shoulder, the adapters can be reversed if not defective under this rule. Reversal would allow almost .050 inch of total wear. Figure 9 has been added to illustrate this defect.

Section 215.97 At the recommendation of one commenter, paragraph (b)(7) has been changed to require the addition of free oil until an amount is visible in the bottom of the box after the lubricator is resaturated. The proposal that a specific measurement of oil be visible after resaturation has been deleted. The FRA believes the revised version is adequate for minimum safety and eliminates the likelihood of the loss of wheel traction caused by excess oil running out of a box which is not equipped with rear seal protection.

Section 215.99 In paragraph (a), the typographical errors published in the chart have been corrected.

Several commenters felt that the time periods specified for lubrication of roller bearings under this section would deter the present rapid rate of technological development in the field. The FRA will evaluate technological progress and will not permit the rule to hinder further progress. The time periods may be amended whenever technology so justifies. In the meantime, the waiver provisions of § 215.17 provide the flexibility necessary to permit experimental use of new technology. The FRA has noted, as one commenter pointed out, that improved roller bearings may not require periodic lubrication. The original lubrication may last for the life of the parts. Therefore, this section has been modified to apply only to bearings which must be periodically lubricated by design.

One commenter pointed out, in response to paragraph (c)(2) of this section, that a dispensing device does not require "weekly" checking because of its reliability and restricted use. The FRA agrees, and the rule has been changed to require monthly checks on the accuracy of the device.

Section 215.101 This section in the notice has been deleted as surplusage.

Section 215.103 The provisions proposed in this section are incorporated in § 215.11.

Section 215.123 Several commenters contended that the restriction of wear to 25 percent of cross section in paragraph (a)(4) would be prohibitive. These commenters stated that the industry standard is 40 percent in certain wear areas and that these areas could safely be built-up to original dimensions by welding. The FRA decided to change the final rule to allow for the greater wear limits in friction snubber pockets, gibs, column guides, and cast integral brake beam supports and to permit the weld buildup for repair.

Regarding paragraph (c) of § 215.123, commenters were primarily concerned that side bearings act in pairs while the wording in the notice addressed only a single side bearing. The wording of this subdivision has been changed to reflect the plurality of the foundation of side bearings. Also, a new paragraph (4) has been added, limiting the total clearance of diagonally opposite side bearings.

Several comments indicate that the term "spring package," as proposed in

paragraph (d) of § 215.123, could be construed to mean a prepackaged unit rather than an assembly made up of individual springs and snubbers. The FRA decided to change the wording from "spring package" to "spring assembly" to avoid possible confusion.

A few commenters pointed out that many car trucks do not have spring planks by design and would be defective under the "spring plank missing" provision proposed in paragraph (e) of § 215.123. As a result, this has been rewritten to apply only to trucks whose design includes spring planks.

Section 215.125 (This section in the notice has been redesignated as § 215.153). Paragraph (a) provides that a car body is defective if it has less than 2½ inches clearance above the rail. Numerous commenters asked that this requirement be liberalized although no evidence was submitted to support the safety of allowing a closer clearance. The 2½ inches requirement comports with the Locomotive Inspection Regulations; and the FRA believes it would not be advisable to change the minimum clearance in the absence of supporting data.

Several commenters suggested that paragraph (d) of the section (now redesignated as paragraph (e)), regarding a broken, cracked, or bent center sill, be limited to that portion of the center sill which is between bolsters and not applied to the draft portions outside the bolsters. The FRA feels that the most critical portion of the center sill, from a safety standpoint, is the draft portion the commenters want to eliminate. A failure in the draft portion can result in a train-break and the inherent hazards involved. For this reason, the subdivision has not been changed.

With respect to paragraph (f) of the section (now redesignated as paragraph (g)), numerous commenters would limit the defect caused by a broken side sill, body bolster, or cross bearers to situations in which the car body bears on the truck and restricts swiveling or interferes with the running gear. The FRA feels that a break in these members is indicative of a serious problem which should be corrected before it deteriorates to where the car body bears on the track.

Section 215.173 In paragraph (a)(3), the words "front face" have been changed to "guard arm" and "less than" changed to "more than" as a result of comments indicating the language in the proposal was incorrectly stated.

Comments from several sources reveal that the wear limit proposed for "F" type couplers is not the industry standard. Instead of 5/16 inch as proposed, the correct dimension is 7/16 inch, and the rule has been changed accordingly. The dimensions on "E" and "F" couplers are the same. Thus, the wear limits under paragraphs (a)(2) and (b)(1) of the section are the same.

Section 215.175 Several commenters were concerned that knuckles cannot be gaged while in place in the coupler. Although this may be true, there is no need to gage the knuckle until the coupler assembly is condemnable by gages 3 and 4. When this occurs, the knuckle should be removed and gaged to determine if the knuckle or the coupler should be replaced.

In paragraph (c)(3) of this section, the phrase "open top car" has been replaced with "hopper car" and "gondola car." This change makes the defective condition applicable only to those cars which may be subject to roll-over dumping.

Section 215.177 Several commenters pointed out that uncoupling levers were also covered by the Safety Appliance Acts and the attendant regulations. The FRA believes there is a need for double coverage because under the Safety Appliance Acts the coverage relates to intentional uncoupling of cars, whereas this new safety standard covers the problem of unintentional, or accidental, uncoupling and the inherent hazard therein.

Section 215.179 Numerous commenters stated that the interlocking features on "F" couplers would not be a valid safety requirement because "E" couplers are not so equipped and the "F" coupler can function as an "E" coupler even if its interlocking features are defective. The FRA agrees with this general statement and has modified the requirement respecting an interlocking to apply only to cars covered by the Hazardous Materials Regulation, 49 CFR 179.14.

Section 215.193 Commenters were concerned as to what constitutes a "break" under paragraph (a). In response to this query, the FRA has defined "break" in § 215.5 as a fracture or separation resulting in a loss of structural integrity so that the component can no longer perform the function for which it was designed.

The wear limits in paragraphs (b) and (d) of this section were the subject of numerous comments. Since an arbitrary dimension as proposed may not fully reflect the safety of a given part, especially if a difference in material is involved, the FRA decided that it is more reasonable to adopt a percentage of cross section limitation rather than a finite dimension.

Section 215.195 This section has been revised to require that immobilization instructions for cushioning devices be affixed to the devices. Paragraphs (a) and (b) of this section, as proposed in the notice, have been rewritten and transferred to a new § 215.197. With respect to paragraph (b) in the notice, numerous commenters were concerned about the proper procedure for immobilizing a cushioning unit. Because proper immobilization is important and could affect the safe movement of the car, the FRA decided that instructions to effect immobilization must be readily available to railroad personnel by being affixed to each of the units. The instructions on each unit should conform to the manufacturer's recommendations for immobilization. Preferably, only the manufacturer's instructions should be used.

Section 215.197 This is a new section which includes provisions proposed under § 215.195. Paragraph (b) requires immobilization of a cushioning unit in accordance with instructions affixed to the unit.

Docket RSFC–3. The FRA received many comments in Docket RSFC–3, Prohibited Equipment, 23 of which were from non-Class I railroads. These non-Class I railroads that commented have a combined reported ownership of 4,535 cars, or approximately three-tenths of one percent of the Nation's freight car fleet. These commenters requested the FRA to take into account their exceptional safety records which they attribute to operating cars at low speeds over short distances.

The FRA accident statistics reveal that the non-Class I railroads that commented reported a total of 51 derailments and three personal injuries for the years 1968–1972. A further investigation of accident data for the same period reveals that all Class I railroads reported 1.26 casualties per million train miles, whereas all non-Class I railroads had a combined casualty rate of .64 per million train miles. A casualty rate of almost one half the Class I railroads rate substantiates the claim of the non-Class I railroads that their low speed, low density, short haul operations are generally safer than the higher speed, longer haul operations of the Class I railroads.

In commenting on the proposed rules, the American Short Line Railroad Association (ASLRA) reported that its 152 members operate trains at an average speed of slightly over 13 m.p.h., over an average distance of 13.5 miles. The ASLRA also stated that its members operate a controlled fleet of cars, which are captive on an owning railroad's line because they are not interchanged with other railroads. Many of these cars are of the type that would have been prohibited by the proposed rules. In fact, the ASLRA indicated that about 16,000 cars operated by the short lines would have to be replaced or modified at great expense if the proposed rules were adopted.

Because the FRA accident data substantiates the claims made by the non-Class I railroads as to their generally safer operating environments when compared to that of Class I railroads, it was decided to revise the proposed prohibited car rules to permit the continued operation of cars more than 50 years old and cars with certain components, but only upon approval of the Federal Railroad Administrator.

Consequently, the proposed prohibited components included in the notice were divided into two categories. Section I of Appendix B contains those car components which have a high failure rate and a history of causing catastrophic accidents. Section 215.223 provides that beginning on January 1, 1975, these components are prohibited in all railroad freight car operations. The components may continue to be used until then, but not on a car transporting hazardous materials. Section II of Appendix B lists components which have a high failure rate in long haul, high speed, high density service but which have a history of lower failure rates in low speed, low mileage, low density, controlled operating conditions. Section 215.225 provides that cars equipped with these components, cars more than 50 years old, and cars with a Duryea underframe constructed before April 1, 1950, may only be operated upon approval of the Federal Rail-

road Administrator. Because of the slight danger involved, an exception is provided for a caboose with a Duryea underframe constructed before April 1, 1950, which is operated as the last car in a train.

As stated, Appendix B in the notice, which contained the list of components proposed to be prohibited from service, has been divided into two sections. Section I lists those components whose use is prohibited in railroad service by the final rules. Section II lists those components whose use in railroad service is restricted by a requirement that prior approval of the FRA must be obtained. The following analysis discusses the FRA's disposition of each model or type of component in the order in which it was included in the notice:

"K" type air brake. By an order effective December 31, 1954 (Docket No. 13528), the Interstate Commerce Commission effectively prohibited the use of "K" brake equipment in freight service by common carriers by rail. This order was adopted by the FRA effective April 1, 1967, at the inception of the Department (32 FR 5612). The prohibition of "K" brakes by Part 215 repeats the effect of that order to the extent that it applies to railroad freight cars operating on track which is in the general railroad system of transportation. (See § 215.3) Although the Association of American Railroads has forbidden "K" brakes to be used on cars in interchange, it should be noted that Part 215 and the 1954 ICC order apply irrespective of whether a car is interchanged.

Comments regarding "K" brakes were limited to such uses as "engaged in tourist summer operations," "museum and historical interests," and a "large mining operation." These uses would appear to be of the type not covered by Part 215, either because the use is not in the general railroad system of transportation or it involves a car once used to carry freight but which has been redesigned to carry passengers. This does not mean, however, that such users are exempt from the 1954 ICC order that is concurrently in effect prohibiting "K" brakes. The applicability of the ICC order is somewhat broader than Part 215 in that it affects all common carriers by rail in interstate commerce and applies to passenger cars as well as freight cars. Any inconsistency which may result between any waiver or exemption from the 1954 ICC order and Part 215 would be resolved in favor of Part 215, insofar as Part 215 applies to the facts involved.

Axles. Industry comments substantiate the high failure rate of "AAR alternate standard tubular type" axles. Therefore, the proposed prohibited use of this axle has not been modified in the final rule.

Because, as originally proposed under § 215.55, an axle stamped "RJ" would be defective and could not be used, this type of axle has been included in the list of prohibited components in section I of Appendix B. Contrary to some comments, in recent months the FRA has received reports of accidents resulting from the failure of axles with journals stamped "RJ."

Plain bearings. It was proposed to prohibit the solid cartridge type plain bearing because the AAR forbids its use on car in interchange and it was not believed to be acceptable for railroad service. However, the comments indicate that the solid cartridge bearing is an improvement over the regular plain bearing and that there are very few still in service. In view of these comments and since the failure rate is not high, the cartridge bearing has been included in section II of Appendix B for restricted usage only.

Roller bearings. The proposal to prohibit the use of three types of roller bearings respectively marked AAR 2, AAR 7, and AAR 11 has not been changed in the final rules. Most commenters sustained the FRA's opinion that these bearings are unsatisfactory for railroad service.

Couplers. The final rules permit the two couplers, AAR type D and AAR type E (5" x 7" shank), included in the notice to be used under limited conditions. The couplers are both listed under section II of Appendix B. The "D" coupler is an earlier design that has been replaced by the type "E" coupler. Many commenters disclosed, however, that the "D" coupler is still being used safely under low speed, low mileage, non-interchange operating conditions. The "E" coupler is also being used safely under the same controlled operating conditions, although in comparison with other designs it proved unsatisfactory in interchange service.

Draft gears. It was proposed to prohibit the Miner FR–16 and FR–19 draft gears because they close beyond their maximum travel, resulting in fatigue conditions from excessive impacts. Nevertheless, the comments indicate that these gears can be used safely in operations where there is an opportunity for adequate supervision and control. For this reason the FR–16 and FR–17 draft gears are now listed in Section II of Appendix B.

Trucks. The "arch bar" type truck is now listed in Section II of Appendix B based on comments which indicate it is being used safely in low speed, non-interchange service.

It was proposed to prohibit truck frames cast from a material other than steel. However, all recently constructed truck frames are cast in steel. The proposal would have applied to only a very few older truck frames. Therefore, because it would have very little effect on railroad safety, the proposal has been deleted.

The proposed prohibition of transom frame trucks has also been deleted in the final rules because it is evident that there are only a very few in existence. These few are in controlled, non-interchange service and are not a problem. This deletion also eliminates any confusion that might have existed in distinguishing between the old transom frame truck and the somewhat similar truck presently used on a number of cabooses.

Because all recently constructed truck bolsters are cast in steel, the proposal to prohibit bolsters cast from any other material has been deleted in the final rules. The proposal would have applied to a very few older truck bolsters, resulting in a slight effect on railroad safety.

A truck with a cast steel pedestal type side frame, a short wheel base, and no bolster was proposed to be prohibited because it had proved unsafe in interchange service. The comments, however, indicate that this truck is being operated safely in low speed, low capacity, non-interchange service. In consideration of these comments, this type of truck is now listed in section II of Appendix B, which allows its use only after approval of the FRA.

Truck bolsters. Bolsters cast prior to the year 1927 were proposed to be prohibited because they cannot meet the criteria for testing which became effective in 1927. However, as a result of many comments indicating their safe usage in non-interchange service, these bolsters have been included in section II of Appendix B and may be used under limited conditions.

The prohibition against bolsters that do not have identification marks or pattern numbers was proposed in the notice because these bolsters may be of questionable quality and capacity. However, because commenters indicated that these bolsters have been used safely in controlled, non-interchange service, they also have been included in section II of Appendix B.

Because of reported high failure rates, certain bolsters with pattern numbers listed under the manufacturers, A.S.F., Dresser (Symington), Birdsboro, and Lenoir car works, were proposed to be prohibited. The comments do not contain sufficient evidence to warrant a modification in the final rules. However, the list now included in section I of Appendix B was modified to (1) replace Birdsboro 1668 with Birdsboro 1468, correcting an error in the notice, and (2) delete A.S.F. 21413–D. The A.S.F. number has been removed because the FRA believes that there is no bolster with this number.

Truck side frames. Because of their high failure rates, certain truck side frames listed by pattern numbers were proposed to be prohibited from service. Most commenters verified the high failure rates; and no evidence was presented to warrant any modification of the proposal in the final rule. Therefore, as proposed in the notice, section I of Appendix B contains the list of prohibited side frames by pattern numbers according to the following manufacturers: A.S.F., National Castings, Buckeye, Dominion, Pittsburgh Steel Foundry, Scullin Steel, Bettendorf, and Canadian Steel Foundry. Scullin Steel 4451 has been deleted from the list because the FRA believes that there is no side frame with this number.

It was also proposed to prohibit the use of other side frames on a car truck—namely, those which (1) were cast prior to 1927, (2) do not have an identification

mark or pattern number, or (3) have an "I," "T," or "L" section compression or tension member. The comments, however, indicate that these side frames are being used safely in low speed, non-interchange service. Thus, instead of prohibiting entirely their use, FRA has decided that they may not be used without prior FRA approval.

Wheels. It was proposed to prohibit the use of cast iron wheels because of reported accidents caused by the failure of the wheels. Cast iron wheels have not been produced since the 1950's due to the tendency for shelling of rim metal and broken flanges. Many comments indicate that a number of these wheels are still being used in limited service without problems. Nevertheless, because the wheel is one of the most critical railroad freight car components, and a wheel failure can result in a catastrophic accident, the use of cast iron wheels has been prohibited as proposed.

Cast steel wheels marked "AAR X–2" are an experimental design manufactured with 1½ percent carbon. The FRA believes that railroad experience proves the high carbon content to be undesirable and many commenters are in accord. Therefore, these wheels are prohibited in the final rules.

The notice contained a proposal to prohibit the use of cast steel wheels marked "AAR X–4" because they are experimental wheels produced in very limited quantities, which were forbidden on cars in interchange by the AAR after the manufacturer withdrew them from production. Because of the small number in use and low failure rates, some commenters requested that these wheels be allowed to continue in service until the car truck involved is dismantled. In view of these comments, the FRA has included the "AAR X–4" wheel in section II of Appendix B for restricted usage.

Davis cast steel wheels are an early design withdrawn from production in the late 1930's. Because of the lack of information concerning the manufacturer's withdrawal, this wheel has also been included in section II of Appendix B for restricted usage.

Southern cast steel wheels manufactured before May 7, 1958, are an early design using 1½ percent carbon which was proposed to be prohibited because service performance with high carbon wheels has proved unsatisfactory. The comments sustain the placement of these wheels on the prohibited list in section I of Appendix B.

Griffin cast steel wheels, 70 ton, three riser, ball rim design, were proposed to be prohibited due to their failure rate. Evidence submitted by commenters verifies the high failure rate. Consequently, no change has been made in the final rule, and these wheels are now on the prohibited list in section I of Appendix B.

Wrought steel wheels manufactured before 1927 were forbidden by the AAR to be reused after the truck involved was dismantled. Commenters indicated that this requirement appeared to be based solely upon an orderly program to remove older wheels from service. Commenters also recommended that these wheels be removed on a car's initial trip to the repair track for "cyclical" repairs and inspections. Consideration was given to these comments, and as a result these weels have been placed in section II of Appendix B for use in restricted service.

Griffin cast steel wheels, 70 and 50 ton, 33 inch two-wear, three riser (marked "X5" or "CS–2") are prohibited in the final rules because commenters verified the FRA's evidence of premature failure when these wheels approach minimum rim thickness.

Yokes. Riveted, keyless, and vertical key type yokes were included in the list of proposed prohibited components because railroad experience with these yokes has been unsatisfactory. However, some commenters indicated that a number of these yokes are being used in non-interchange service without problems. Therefore, in consideration of these comments, these yokes are now included in section II of Appendix B which only permits their continued use upon approval of the FRA.

In the notice it was proposed to prohibit a Farlow draft attachment from use on a yoke. Commenters indicated that a superior method was developed to connect the draft components and the car body; and the subsequent elimination of the Farlow draft attachment lead to improvement in the rigid shank coupler. Commenters also indicated that Farlow draft attachments are being used in non-interchange service without problems. In view of these comments, the Farlow draft attachment has been included among the components in section II of Appendix B and may be used upon approval of the FRA.

In consideration of the foregoing, Title 49 of the Code of Federal Regulations is amended by adding a Part 215 to read as follows, effective January 1, 1974.

Issued in Washington, D.C. on November 12, 1973.

JOHN W. INGRAM,
Administrator.

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AUTHORITY: Secs. 202 and 209, 84 Stat. 971 and 975, 45 U.S.C. 431 and 438; and § 1.49(n) of the regulations of the Office of the Secretary of Transportation, 49 C.F.R. 1.49(n).

Subpart A—General

§ 215.1 Scope of part.

This part prescribes minimum Federal safety requirements for railroad freight cars.

§ 215.3 Application.

(a) This part applies to railroad freight cars operating on standard gage track which is part of the general railroad system of transportation.

(b) This part does not apply to railroad freight cars which are operated only on track inside an installation which is not part of the general railroad system of transportation.

§ 215.5 Definitions.

As used in this part—

(a) "Break" means a fracture or separation resulting in a loss of structural integrity so that the component involved can no longer perform the function for which it was designed.

(b) "Railroad freight car" means a car designed to carry freight or railroad personnel by rail, and includes a—

(1) Boxcar;
(2) Refrigerator car;
(3) Ventilator car;
(4) Stock car;
(5) Gondola car;

(6) Hopper car;
(7) Flatcar;
(8) Special car;
(9) Caboose car;
(10) Tank car; or
(11) Yard car.

(c) "Reconditioned" means that all railroad freight car components subject to requirements of this part have been restored by repair or replacement to—

(1) Their original condition; or

(2) A physical and functional condition which is equivalent to or better than their original condition.

§ 215.7 Responsibility for defective cars.

Any railroad that knows, has notice, or should have known that a railroad freight car that it operates has any component which is described as defective in this part is responsible for compliance with this section. Subject to § 215.9, each railroad freight car which has a component described as defective in this part must be—

(a) Repaired; or

(b) Removed from service.

§ 215.9 Movement of defective cars for repair.

(a) Except as provided in paragraph (b) of this section and § 215.197(b), a railroad freight car which has any component described as defective in this part may be moved for repair only after—

(1) A person designated under § 215.15 determines—

(i) That it is safe to move the car; and

(ii) The maximum speed and other restrictions necessary for safely conducting the movement; and

(2) All operating personnel on the train in which the car is to be moved are notified in writing of the presence of the defective car and the maximum speed and other restrictions determined under paragraph (a)(1)(ii) of this section.

(b) For purposes of paragraph (a) of this section, when a railroad freight car is discovered to have any component described as defective in this part at a location where a person designated under § 215.15 is not on duty, but the car is inspected by available personnel and found to be safe to move, the car may be moved to the next location en route where a person designated under § 215.15 is on duty.

§ 215.11 Stenciling.

(a) The railroad or private car owner reporting mark and the car number must be stenciled in clearly legible letters and numbers at least 7 inches high on each side of each railroad freight car body. However, on tank cars the reporting mark and car number may appear in any location on the car that is visible to a person walking at track level alongside the car.

(b) After March 31, 1974, the following must be stenciled in clearly legible letters on each side of each railroad freight car described in § 215.225(a):

(1) Immediately following the car number, in the same color as the reporting mark, the symbol "—X" (a hyphen and the letter X), the letter X of which must be the same size as the reporting mark.

(2) Following the symbol "—X", in letters at least 1 inch high, as many of the following terms as are needed to completely indicate the basis for the restricted operation of the car under § 215.225:

(i) Age.
(ii) Coupler.
(iii) Draft.
(iv) Bearings.
(v) Truck.
(vi) Underframe.
(vii) Wheels.
(viii) Yoke.

(c) The following must be stenciled in a tabular form in clearly legible letters and numbers at least 1 inch high on each side of each railroad freight car body:

(1) The symbol "BLT" followed by the month and year the car was originally constructed.

(2) If the car has been reconditioned, the symbol "RCD" followed by—

(i) The month and year it was last reconditioned;

(ii) The reporting mark of the railroad that initially operated the car after it was last reconditioned; and

(iii) Letters or abbreviated words which identify the entity that last reconditioned the car.

(3) If the car is equipped with plain bearing boxes, the symbol "RPKD" followed by a hyphen and the number of months (24 or 30) within which the boxes must be lubricated under § 215.97.

(4) If the car is equipped with roller bearings which by design must be periodically lubricated, the symbol "LUB" followed by a hyphen and the number of months (12, 18, or 36) within which the bearings must be lubricated under § 215.99.

(5) Except for a car originally constructed or reconditioned within the period required by § 215.97 or § 215.99 for lubrication of its journal bearings, following the marks stenciled in accordance with paragraphs (c) (3) or (4) of this section;

(i) The month and year all journal bearings were last lubricated as required by § 215.97 or § 215.99;

(ii) The reporting mark of the railroad that initially operated the car after that lubrication; and

(iii) Letters or abbreviated words which identify the entity that performed the lubrication.

(6) In the case of a "high utilization" car for which a railroad maintains mileage records under § 215.25(a), the symbol "HU" followed by—

(i) The reporting mark of that railroad; and

(ii) Letters or abbreviated words which identify where the records are located.

(7) After December 31, 1976, except for a car originally constructed or reconditioned within the period required by § 215.25 for periodic inspection, the symbol "INSP" followed by—

(i) The month and year the car was last inspected as prescribed by § 215.27;

(ii) The reporting mark of the railroad that initially operated the car after that inspection; and

(iii) Letters or abbreviated words which identify the entity that performed the inspection. Appendix C to this part contains examples of stenciling required by this paragraph.

(d) Whenever any portion of the information which must be stenciled on a railroad freight car under paragraphs (c)(1)–(5) and (7) of this section is missing, incorrect, or illegible, the car must be inspected or lubricated as follows:

(1) With respect to the information under paragraphs (c)(1) and (2) of this section, the car must be—

(i) After December 31, 1976, inspected as prescribed by § 215.27 unless stenciling under paragraph (c)(7) of this section indicates that the car otherwise complies with the inspection requirements of § 215.25; and

(ii) Lubricated as prescribed by § 215.97 or § 215.99 unless stenciling under paragraphs (c)(3)–(5) of this section indicates that the car otherwise complies with the lubrication requirements of § 215.97 or § 215.99.

(2) With respect to the information under paragraph (c)(3)–(5) of this section, the car must be lubricated as prescribed by § 215.97 or § 215.99.

(3) With respect to the information under paragraph (c)(7) of this section, the car must be inspected as prescribed by § 215.27.

§ 215.15 Designation of qualified persons.

(a) Each railroad that operates railroad freight cars to which this part applies shall designate persons qualified to inspect railroad freight cars for defects prescribed by this part. Each person designated must have demonstrated to the railroad his knowledge and ability to inspect railroad freight cars for compliance with the requirements of this part.

(b) With respect to designations under paragraph (a) of this section, each railroad shall maintain written records of—

(1) Each designation in effect; and

(2) The basis for each designation.

§ 215.17 Waivers.

(a) A railroad may petition the Federal Railroad Administrator for a waiver of compliance with any requirement prescribed in this part.

(b) Each petition for a waiver under this section must be filed in the manner and contain the information required by § 211.11 of this chapter.

(c) If the Administrator finds that a waiver of compliance is in the public interest and is consistent with railroad safety, he grants the waiver subject to any conditions he deems necessary. Notice of each waiver granted, including a statement of the reasons therefor, is published in the FEDERAL REGISTER.

§ 215.19 Civil penalty.

Any railroad that operates a railroad freight car in violation of any requirement prescribed in this part is liable to a civil penalty of at least $250 but not more than $2,500 for each violation. Each

day of each violation constitutes a separate offense.

Subpart B—Inspection

§ 215.21 Scope.

This subpart prescribes requirements for inspection of railroad freight cars.

§ 215.23 Safety inspection required.

(a) After May 31, 1974, each railroad freight car in a train must be given a safety inspection, in accordance with instructions approved by the Federal Railroad Administrator, by a qualified person designated under § 215.15 at the point where the car is placed in the train. However, except at the point where the train is originally made up, if a qualified person is not on duty at the point where the car is placed in the train but the car is inspected by available personnel for conditions adverse to safe movement, the safety inspection may be performed at the next point en route where a qualified person is on duty.

(b) Before February 1, 1974, each railroad that is in operation on January 1, 1974, and operates railroad freight cars to which this part applies shall submit to the Federal Railroad Administrator for approval under § 215.29 three copies of its instructions for safety inspections of railroad freight cars required by this section. Each railroad that commences operations after January 1, 1974, shall submit its instructions to the Administrator for approval at least 90 days before the date it commences operations. Instructions submitted to the Administrator for approval must include procedures to be followed by qualified persons to assure compliance with all applicable requirements of this part.

§ 215.25 Periodic inspection required.

(a) After December 31, 1976, a railroad may not operate a railroad freight car unless—

(1) In the case of cars other than high utilization cars, the car was inspected as prescribed by § 215.27 within the preceding 48 months or was originally constructed or reconditioned within the preceding 96 months; and

(2) In the case of high utilization cars, the car was inspected as prescribed by § 215.27 within the preceding 12 months or was originally constructed or reconditioned within the preceding 24 months.

However, a high utilization car for which a railroad maintains and makes available to the Federal Railroad Administration a mileage record sufficient to show that the car traveled less than 25,000 miles during the preceding 12 months may be operated if that car meets the inspection requirements of paragraph (a)(1) of this section and is stenciled in accordance with § 215.11(c)(6).

(b) For the purpose of this section, a "high utilization car" is a car—

(1) Specifically equipped to carry trucks, automobiles, containers, trailers, or removable trailer bodies for the transportation of freight; or

(2) Assigned to a train which operates in a continuous round trip cycle between the same two points.

(c) Before June 1, 1974, each railroad that is in operation on January 1, 1974, and has in service railroad freight cars to which this part applies shall submit to the Federal Railroad Administrator for approval under § 215.29 three copies of a program to bring all those cars into compliance with paragraph (a) of this section by January 1, 1977. Each railroad that commences operations after January 1, 1974, shall submit a program to the Administrator for approval at least 90 days before the date it commences operations. Each program submitted to the Administrator for approval must include procedures to be followed by inspection personnel to assure compliance with all applicable requirements of this part.

§ 215.27 Periodic inspection: Suspension and draft systems.

Each inspection under § 215.25 must include an examination, by a person designated under § 215.15, to determine that all components of a railroad freight car's—

(a) Suspension system, including wheels, axles, bearings, adapters, and truck components; and

(b) Draft system, including couplers, cushioning units, center sill, body bolsters, and center plates—comply with the requirements of this part.

§ 215.29 Approval procedures.

Within 90 days after receipt of safety inspection instructions or periodic inspection program filed under this subpart, the Administrator notifies the railroad of his approval or that modification is necessary to comply with the applicable requirements of this part. The railroad may petition the Administrator to reconsider the notice to modify. The petition must be filed within 30 days after the railroad receives the notice. Unless the Administrator specifically decides otherwise, the filing of the petition does not stay the effectiveness of the notice pending a decision by the Administrator.

§ 215.31 Amendment procedures.

(a) The Federal Railroad Administrator may amend any instructions for a safety inspection or periodic inspection program approved under this part—

(1) Upon application by the railroad concerned, if the Administrator determines that safety in rail transportation and the public interest allow the amendment; or

(2) On his own motion, if the Administrator determines that safety in rail transportation and the public interest require the amendment.

(b) In the case of an amendment proposed under paragraph (a)(2) of this section, the Administrator notifies the railroad in writing of the proposed amendment, fixing a reasonable period (but not less than 7 days) within which it may submit written information, views, and arguments on the amendment. After considering all relevant material the Administrator notifies the railroad of any amendment adopted, or rescinds the notice. The amendment becomes effective not less than 30 days after the railroad receives notice of its adoption, unless it petitions the Administrator to reconsider the amendment, in which case its effective date may be stayed by the Administrator. If the Administrator finds that there is an emergency requiring immediate action with respect to safety in rail transportation that makes the procedure in this paragraph impracticable or contrary to the public interest, he may issue an amendment effective on the date the railroad receives notice of it. In such a case, the Administrator incorporates the findings and a brief statement of the reasons for his action in the notice of amendment.

(c) An applicant must file its application for an amendment of instructions or inspection program with the Administrator at least 30 days before the date it proposes for the amendment to become effective.

Subpart C—Wheels

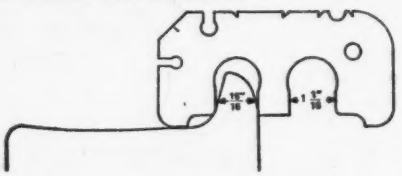
§ 215.41 Scope.

This subpart prescribes minimum safety requirements for wheels on railroad freight cars.

§ 215.43 Defective wheels.

A wheel is defective if it has any of the following conditions:

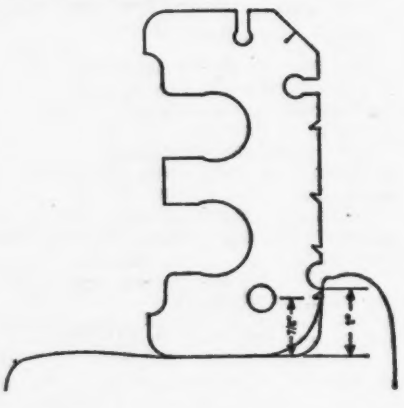
(a) The flange is worn to a thickness of fifteen-sixteenths inch or less measured at a point three-eighths inch above the tread. (See Figure 1.)



METHOD OF MEASURING WHEEL FLANGE THICKNESS USING GAGE NO. 1

FIGURE 1

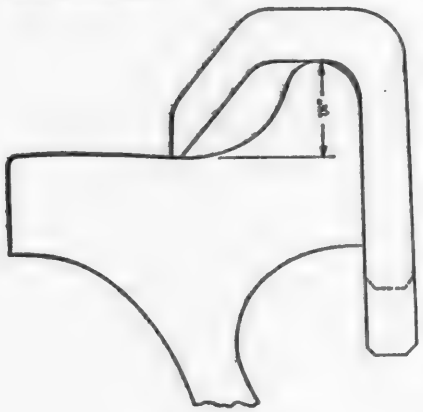
(b) The flange has a flat vertical surface extending 1 inch or more from the tread. (See Figure 2).



METHOD OF MEASURING FLAT VERTICAL SURFACE ON WHEEL FLANGE USING GAGE NO. 1

FIGURE 2

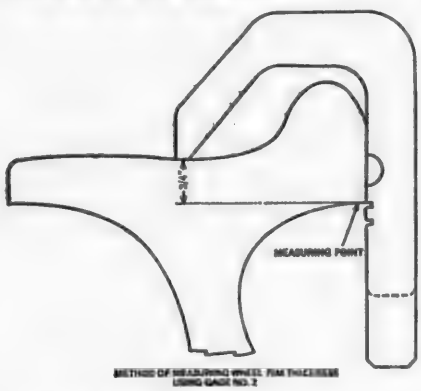
(c) The flange is 1½ inches or more from the tread to the top of the flange. (See Figure 3).



METHOD OF MEASURING WHEEL TREAD WEAR USING GAGE NO. 2

FIGURE 3

(d) The rim thickness is three-quarters inch or less. (See Figure 4.)



METHOD OF MEASURING WHEEL RIM THICKNESS USING GAGE NO. 2

FIGURE 4

(e) A cracked or broken rim, flange, plate, or hub.

(f) A chip in the rim which is—

(1) More than 1½ inches in circumferential length;

(2) More than one-half inch wide measured radially; or

(3) More than one-half inch deep.

(g) A chip on the throat side of the flange.

(h) A chip in the back side of the flange more than 1 inch in circumferential length, or one-half inch in width or depth.

(i) Contiguous (adjoining) pieces of metal shelled out of the circumference of the tread.

(j) A slid-flat spot more than 2½ inches in length or two adjoining flat spots each more than 2 inches in length.

(k) A hole through the wheel plate not intended by design.

(l) A circumferential groove in the tread more than one-eighth inch in depth.

(m) A scrape, dent, or gouge in the wheel plate surface more than one-eighth inch deep that causes an abrupt change in the finish of the plate surface.

(n) A loose wheel, as evidenced by movement on the wheel seat, or oil seepage on the back hub or plate from inside the wheel fit.

(o) Any welding on the wheel.

(p) A wheel which has been overheated, as evidenced by a reddish-brown color covering the front or back face of the rim and extending half way to the hub.

(q) Painted so as to conceal defects.

§ 215.45 Defective wheel sets.

A wheel set is defective if the wheels are out of gage so that the distance between the inside faces of the wheel rims is less than 53 inches or more than 53⅜ inches.

Subpart D—Axles

§ 215.51 Scope.

This subpart prescribes minimum safety requirements for axles on railroad freight cars.

§ 215.53 Defective axles.

An axle is defective if it has any of the following conditions:

(a) A break or crack.

(b) A scrape, dent, or gouge between the wheel seats more than one-eighth inch deep.

(c) Welding on the axle.

(d) A bend in the axle which produces a runout of more than three-eighths inch at the center of the axle.

(e) In the case of journals on plain bearing axles, wear beyond the limits set forth in Figure 5.

PLAIN BEARING AXLES

Journal size standard inches	Journal collar, inch (A)	Journal length, inches (B)	Journal diameter, inches (C)
4¼ by 8	3/16	8 1/16	3⅜
5 by 9	3/16	9 1/16	4½
5½ by 10	3/16	10 1/16	5
6 by 11	3/16	11 1/16	5½
6½ by 12	3/16	12 1/16	6
7 by 12	3/16	12 1/16	6½

FIGURE 5

(f) Painted so as to conceal defects described by this section.

§ 215.55 Defective plain bearing journals.

A plain bearing journal is defective if it has any of the following conditions:

(a) A break in the journal collar.

(b) The surface of the journal or fillet has—

(1) A ridge;

(2) A depression;

(3) A circumferential score;

(4) Corrugation;

(5) A scratch;

(6) A continuous streak;

(7) Pitting;

(8) Rust; or

(9) Etching.

(c) A journal which has been overheated.

Subpart E—Journal Bearings

§ 215.81 Scope.

This subpart prescribes minimum safety requirements for journal bearings on railroad freight cars.

§ 215.83 Defective plain bearing boxes.

A plain bearing box is defective if it has any of the following conditions:

(a) It does not contain free oil.

(b) The box lid is missing, broken, or otherwise not preventing contaminants from entering the box.

(c) It contains any foreign matter which has a detrimental effect on the lubricant.

(d) The box is cracked or has holes so as to permit leakage.

§ 215.85 Defective journal lubricating system.

A journal lubricating system is defective if a lubricating pad is missing or has any of the following conditions:

(a) An exposed core or metal part contacting the journal.

(b) The pad is not contacting the journal.

(c) A scorched or burned area.

(d) Glazing over half the pad surface.

(e) Deteriorated or decayed fabric.

(f) A tear along the top, front, back, or side more than half the length of the pad.

§ 215.87 Plain bearings and wedges required.

Each railroad freight car must be equipped with the full number of plain bearings and wedges for which it is designed.

§ 215.89 Defective plain bearings.

A plain bearing is defective if it is not located in its design position or has any of the following conditions:

(a) A break, or crack.

(b) Overheating as evidenced by—

(1) Melted babbit;

(2) Smoke from hot oil;

(3) Journal surface damaged; or

(4) Journal temperature of 400°F. or more.

(c) Wear at either end which reduces its length more one-fourth inch. (Dimension A in Figure 6.)

(d) Combined wear that reduces its length more than three-eighths inch. (Dimension A in Figure 6).

(e) A lug worn more than one-eighth inch. (Dimension B in Figure 6.)

(f) Combined wear on both sides of the lug extension more than one-fourth inch. (Dimension C in Figure 6.)

(g) A loose lining or section of lining broken out.

(h) Lining worn through to brass more than three-eighths inch above the lower edge of the brass sidewall. (Dimension D in Figure 6.)

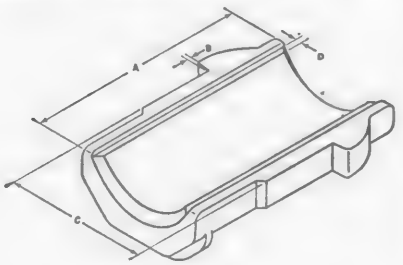


FIGURE 6

§ 215.91 Defective plain bearing wedges.

A plain bearing wedge is defective if it is not located in its design position or has any of the following conditions:

(a) A bend, break, or crack.

(b) Wear measured at the contact surfaces which reduces its overall length more than three-sixteenths inch. (Dimensions A in Figure 7.)

(c) A bottom surface unevenness of more than one-sixty fourth inch. (Dimension B in Figure 7.)

(d) Wear on top beyond the following limits:

Nominal journal size, inches	*Wear limit flat lengthwise, inches (Dimension C in Figure 7)*
4¼ by 8	3¼
5 by 9	4
5½ by 10	4½
6 by 11	5
6½ by 12	5½

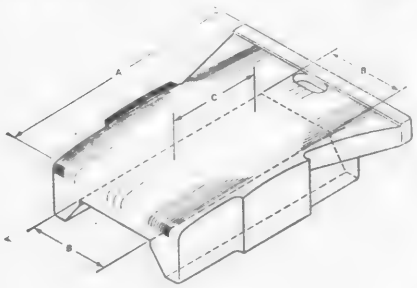


FIGURE 7

§ 215.93 Defective roller bearings.

(a) A roller bearing which has been subjected to any of the following conditions may not be used until it is inspected, and repaired if necessary:

(1) Derailment.

(2) Submerged in water.

(b) A roller bearing is defective if it has any of the following conditions:

(1) Overheating in excess of 200° F.

(2) A loose or missing cap screw.

(3) A broken, missing (unless by design), or improperly applied cap screw lock.

(4) A missing (unless by design) truck side frame key.

(5) A loose or nonfunctioning seal.

§ 215.95 Defective roller bearing adapters.

A roller bearing adapter is defective if it has any of the following conditions:

(a) A break or crack.

(b) Wear to the extent that the adapter is marking the seal assembly.

(c) Wear on the crown of the adapter to the extent that the frame bears on the relief portion of the adapter, as shown in Figure 8.

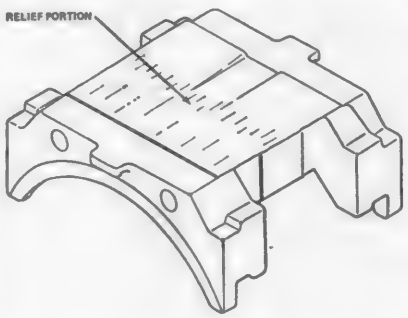
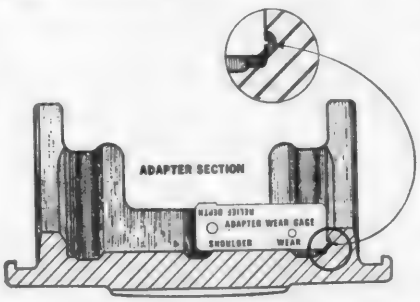


FIGURE 8

(d) Wear the thrust shoulder of narrow adapters more than .025 inch on either side, as measured by Gage No. 8. (See Figure No. 9).



METHOD OF MEASURING ROLLER BEARING ADAPTER THRUST SHOULDER WEAR USING GAGE No. 8.

FIGURE NO. 9

(e) Warp or other distortion.

JOURNAL BEARING LUBRICATION

§ 215.97 Plain bearing boxes.

(a) A railroad may not operate a railroad freight car which is equipped with plain bearing boxes unless within the preceding 24 months, or in the case of a car whose plain bearing boxes are equipped with rear seals, box lid seals, and journal stops, within the preceding 30 months—

(1) The plain bearing boxes were repacked as prescribed by paragraph (b) of this section; or

(2) The car was reconditioned or originally constructed.

(b) A plain bearing box must be repacked according to the following rules:

(1) Remove journal bearing, wedge, and lubricator, and thoroughly clean the box, including the inside of lid and front of box that may contact the lubricator, without using waste material for cleaning purposes;

(2) Examine the journal, journal bearing, wedge, journal stop, and box lid seal, and replace each defective part;

(3) Replace old lubricator with a new one;

(4) Replace dust guard plug when missing or defective and apply sealer to top of plug;

(5) In the case of a wooden dust guard plug, lock it securely in place;

(6) If the car truck is dismantled, examine the rear seal and replace if defective; and

(7) Add free oil to permit resaturation of the lubricator, then before the car is released for service, check to ensure there is free oil visible in the bottom of the box.

§ 215.99 Roller bearings.

(a) A railroad may not operate a railroad freight car which is equipped with roller bearings designed to be periodically lubricated unless—

(1) The roller bearings have been lubricated as prescribed by the following chart and by paragraphs (b) and (c) of this section; or

(2) The car was reconditioned or originally constructed within the number of months prescribed in the chart for lubricating its roller bearings:

Description of bearing	Size of bearing	Amount of lubricant required	Lubricate bearings within the following number of months before car is oper.
Oil lubricated	All	Fill to maximum level	12
Grease lubricated; end caps do not rotate	All	16 ounces	18
Grease lubricated; end caps rotate	12 inches	12 ounces	36
	11 inches	8 ounces	36

(b) In the case of an oil lubricated roller bearing, the filling plug must be properly replaced after the bearing is lubricated.

(c) In the case of a grease lubricated roller bearing, perform the lubrication by—

(1) Immediately before the application of grease—

(i) Cleaning the grease fitting to prevent road dirt and foreign material from being forced into the bearings; and

(ii) Testing the grease fitting to ensure it has not been damaged; and

(2) Using a properly calibrated dispensing device which is equipped with a strainer and is checked monthly to accurately measure ounces of grease.

(d) In the case of grease lubricated roller bearings, only pressure type grease fittings may be used in lubricating the bearings.

Subpart F—Other Truck Components

§ 215.121 Scope.

This subpart prescribes minimum safety requirements for truck side frames, bolsters, side bearings, spring assemblies, and spring planks on railroad freight cars.

§ 215.123 Defective car trucks.

A car truck is defective if it has any of the following conditions:

(a) A side frame or bolster which is—

(1) Broken, patched, cracked, or reinforced with plate, including a break or crack in a bolster gib;

(2) Painted so as to conceal defects described in this section;

(3) Welded and not stress relieved; or

(4) Worn or corroded through more than 25 percent of the cross section; except that surfaces in friction snubber pockets, gibs, column guides, and cast integral brake beam supports which have been worn or corroded through not more than 40 percent of the cross section may be restored to the original cross section by welding without the necessity for heat treatment, but all friction surface welds must be smooth and free of slag.

(b) Any part of the truck is less than 2½ inches above the top of rail under maximum spring deflection.

(c) With respect to the side bearings—

(1) One is broken or missing;

(2) The bearings at one end of the car on both sides are in contact with the body bolster, except by design;

(3) The bearings at one of the car have a total clearance from the body bolster of more than three-fourths inch; or

(4) At diagonally opposite sides of the car, the bearings have a total clearance from the body bolsters of more than three-fourths inch.

(d) A spring assembly—

(1) With a broken or missing snubber or outer spring;

(2) Which does not maintain travel or load; or

(3) Which is weakened so as to be compressed solid.

(e) In the case of a car truck whose design includes spring planks, a spring plank is missing, broken, worn, or corroded through more than 25 percent of its cross section.

Subpart G—Car Bodies

§ 215.151 Scope.

This subpart prescribes minimum safety requirements for certain conditions on railroad freight car bodies.

§ 215.153 Defective car bodies: Loaded or empty.

A car body is defective if it has any of the following conditions:

(a) Clearance above top of rail less than 2½ inches.

(b) A male portion of a standard cylindrical type center plate extending less than 1 inch into the female portion of the center plate.

(c) A center plate not secured.

(d) A center plate cracked through more than 30 percent of the cross section.

(e) Center sill broken, cracked, or permanently bent more than 2½ inches in any 6-foot length.

(f) A broken or missing coupler carrier.

(g) Sidesill, crossbearer, or body bolster broken.

Subpart H—Couplers

§ 215.171 Scope.

This subpart prescribes minimum safety requirements for couplers on railroad freight cars.

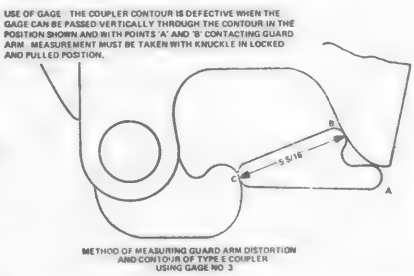
§ 215.173 Defective couplers; generally.

(a) A Type E coupler is defective if it has any of the following conditions:

(1) The shank is bent out of alignment with the head more than nine-sixteenths inch.

(2) The shank is worn more than seven-sixteenths inch.

(3) The distance between the guard arm and the knuckle nose is more than 5$\frac{5}{16}$ inches. (See Figure 10.)


USE OF GAGE: THE COUPLER CONTOUR IS DEFECTIVE WHEN THE GAGE CAN BE PASSED VERTICALLY THROUGH THE CONTOUR IN THE POSITION SHOWN AND WITH POINTS 'A' AND 'B' CONTACTING GUARD ARM. MEASUREMENT MUST BE TAKEN WITH KNUCKLE IN LOCKED AND PULLED POSITION.
B
C
5 5/16
A

METHOD OF MEASURING GUARD ARM DISTORTION AND CONTOUR OF TYPE E COUPLER USING GAGE NO. 3

FIGURE 10

(4) There is a crack or break in the sidewall exceeding the limits shown in Figure 11, or any crack or break in the unshaded area shown in Figure 11.

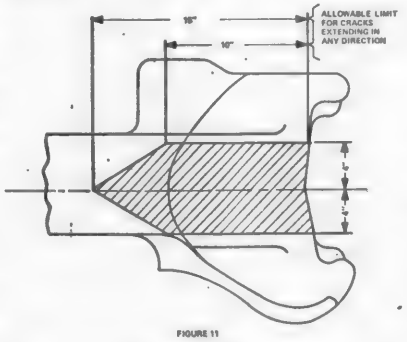
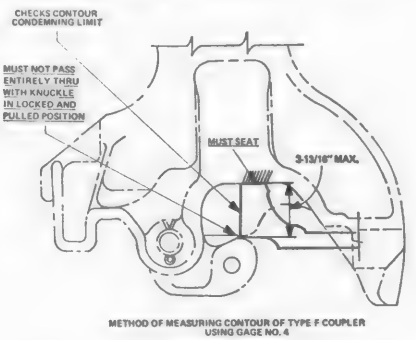


FIGURE 11

(b) A Type F coupler is defective if it has any of the following conditions:

(1) A shank is worn more than seven-sixteenths of an inch.

(2) The distance between the front face and the knuckle nose is more than 3$\frac{13}{16}$ inches (See Figure 12).


CHECKS CONTOUR CONDEMNING LIMIT
MUST NOT PASS ENTIRELY THRU WITH KNUCKLE IN LOCKED AND PULLED POSITION
MUST SEAT
3-13/16" MAX.

METHOD OF MEASURING CONTOUR OF TYPE F COUPLER USING GAGE NO. 4

FIGURE 12

(c) A coupler is defective if it has any of the following conditions:

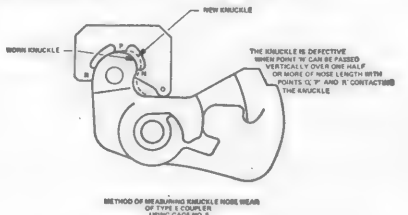
(1) The locklift is inoperative.

(2) The coupler assembly does not have anticreep protection.

(3) The coupler lock is missing, inoperative, bent, cracked, or broken.

§ 215.175 Defective knuckles.

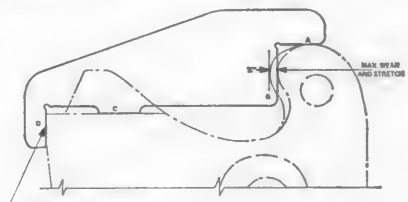
(a) A type E knuckle is defective if it is worn in excess of the limits indicated by Gage No. 5. (See Figure 13.)


NEW KNUCKLE
WORN KNUCKLE
THE KNUCKLE IS DEFECTIVE WHEN POINT 'N' CAN BE PASSED VERTICALLY OVER ONE HALF OR MORE OF NOSE LENGTH WITH POINTS 'Q' 'P' AND 'R' CONTACTING THE KNUCKLE

METHOD OF MEASURING KNUCKLE NOSE WEAR OF TYPE E COUPLER USING GAGE NO. 5

FIGURE 13

(b) A Type F knuckle is defective if it is worn or stretched in excess of the limits indicated by Gage No. 6. (See Figure 14).



METHOD OF MEASURING KNUCKLE NOSE WEAR AND KNUCKLE STRETCH OF TYPE F COUPLER USING GAGE NO. 6

FIGURE 14

(c) Any knuckle is defective if it has any of the following conditions:

(1) It is cracked or broken.

(2) The knuckle pin or knuckle thrower is missing or inoperative.

(3) In the case of a hopper car, a gondola car, or a car with a spring supported coupler carrier, the knuckle pin retainer or cotter key is missing.

§ 215.177 Defective uncoupling devices.

An uncoupling device is defective if it does not meet the following requirements:

(a) The device much have sufficient vertical and lateral movement to prevent

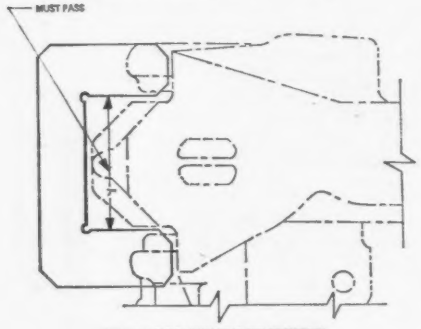
fouling on curves and unintentional uncoupling.

(b) In the case of a bottom operated coupler, the lever must have at least one-fourth inch clearance between the operating rod eye and the locklift level when the coupler is centered and the knuckle is fully closed and locked.

§ 215.179 Defective interlocking features on couplers.

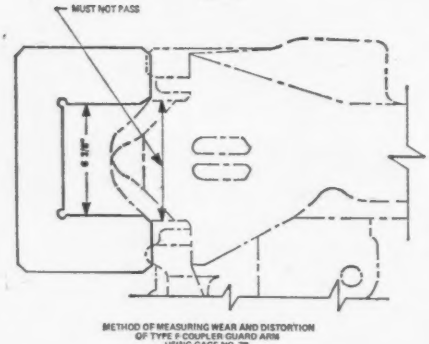
In the case of cars equipped with AAR Type F couplers in accordance with § 179.14 of this title, a coupler is defective if it has any of the following conditions:

(a) The distance between the interlocking surfaces of the guard arm is less than 6⅜ inches or more than 7 inches. (See Figures 15 and 16.)



METHOD OF MEASURING WEAR AND DISTORTION OF TYPE F COUPLER GUARD ARM USING GAGE NO. 7A

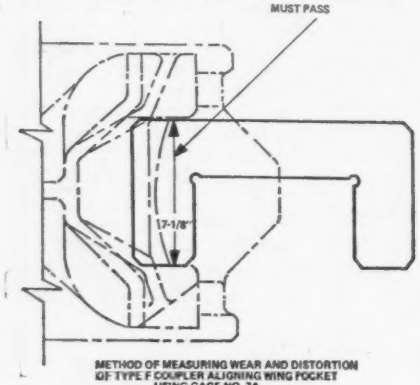
FIGURE 15



METHOD OF MEASURING WEAR AND DISTORTION OF TYPE F COUPLER GUARD ARM USING GAGE NO. 7B

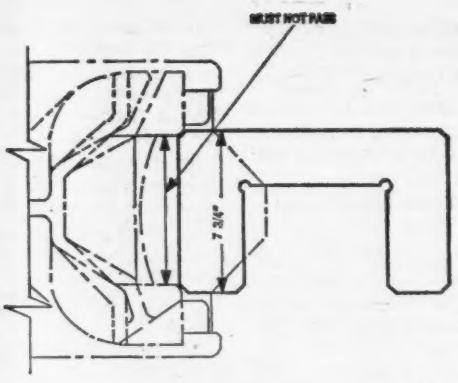
FIGURE 16

(b) The distance between the interlocking surfaces of the aligning wing pocket is less than 7⅛ inches or more than 7¾ inches. (See Figures 17 and 18).



METHOD OF MEASURING WEAR AND DISTORTION OF TYPE F COUPLER ALIGNING WING POCKET USING GAGE NO. 7A

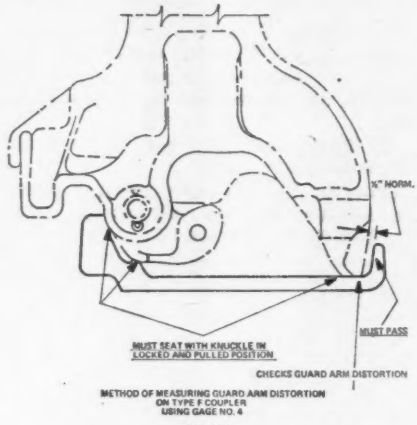
FIGURE 17



METHOD OF MEASURING WEAR AND DISTORTION OF TYPE F COUPLER ALIGNING WING POCKET USING GAGE NO. 7B

FIGURE 18

(c) The guard arm is distorted beyond limits indicated by Gage No. 4 (See Figure 19).



METHOD OF MEASURING GUARD ARM DISTORTION ON TYPE F COUPLER USING GAGE NO. 4

FIGURE 19

(d) The guard arm or aligning wing pocket is cracked, broken, or missing.

Subpart I—Draft Systems

§ 215.191 Scope.

This subpart prescribes minimum safety requirements for draft systems for railroad freight cars.

§ 215.193 Defective draft arrangement.

A draft arrangement is defective if it has any of the following conditions:

(a) A break in the yoke.

(b) A yoke strap worn more than 25 percent of its cross sectional area.

(c) A broken or missing follower plate, draft lugs or fasteners, draft gear, draft key, or draft key retainer.

(d) A draft key worn more than 25 percent of its cross sectional area.

§ 215.195 Cushioning devices.

Each cushioning device used on a railroad freight car must have affixed to it instructions for immobilizing the device.

§ 215.197 Defective cushioning devices.

(a) A cushioning device is defective if it is broken, inoperative, or missing a part.

(b) Before a railroad freight car with a defective cushioning device is moved for repair, the cushioning device must be immobilized according to instructions affixed to the device under § 215.195.

Subpart J—Prohibited and Restricted Equipment

§ 215.221 Scope.

This subpart prohibits the operation of railroad freight cars equipped with certain components and restricts the operation of cars equipped with other components and cars more than 50 years old.

§ 215.223 Prohibited cars.

A railroad may not operate a railroad freight car equipped with any design or type component listed in Section I of Appendix B to this part. However, until January 1, 1975, this section applies only to a car used to transport commodities covered by the Hazardous Materials Regulations in Parts 170–189 of this title.

§ 215.225 Restricted cars.

(a) This section restricts the operation of any railroad freight car which is—

(1) More than 50 years old, measured from the date of original construction;

(2) Equipped with any design or type component listed in section II of Appendix B to this part; or

(3) Equipped with a Duryea underframe constructed before April 1, 1950, except for a caboose which is operated as the last car in a train.

(b) Subject to the requirement of paragraph (d) of this section, after April 30, 1974 a railroad may operate railroad freight cars described in paragraph (a) of this section only under conditions approved by the Federal Railroad Administrator. Petitions for approval must be submitted to the Administrator in triplicate at least 90 days before the date operation is proposed to commence. Each petition for approval must state:

(1) The name and principal business address of the petitioning railroad;

(2) The name and address of the entity that controls the operation and maintenance of the cars involved;

(3) The number, type, capacity, reporting mark and car numbers of the cars;

(4) The maximum load the cars would carry;

(5) The maximum speed at which the cars would be operated;

(6) The territorial limits in which the cars would be operated; and

(7) If the cars would be interchanged with other railroads, the names of those railroads.

(c) Within 45 days after receipt of a petition for approval filed under paragraph (b) of this section, the Administrator notifies the railroad of his decision. The railroad may petition the Administrator to reconsider his decision. A petition for reconsideration must be filed within 30 days after the railroad receives notice of the decision.

(d) A railroad may not use a car described in paragraph (a) of this section to transport commodities covered by the Hazardous Materials Regulations in Parts 170–189 of this title.

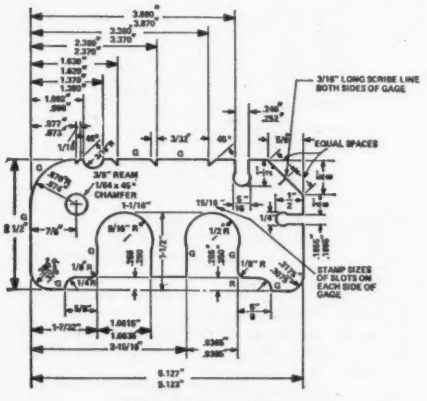
APPENDIX A—DEFECT DETECTION GAGES

General. Each gage must be—

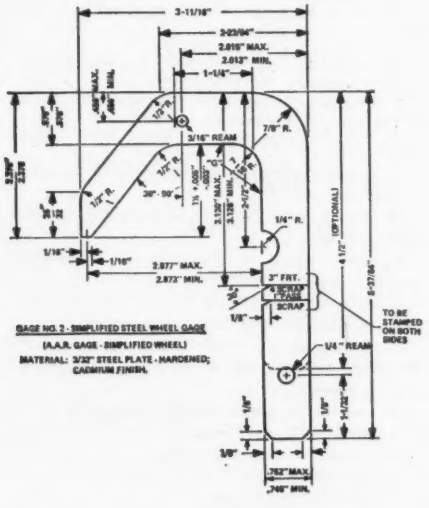
(a) Fabricated as specified in this appendix;

(b) Ground on all gaging surfaces; and

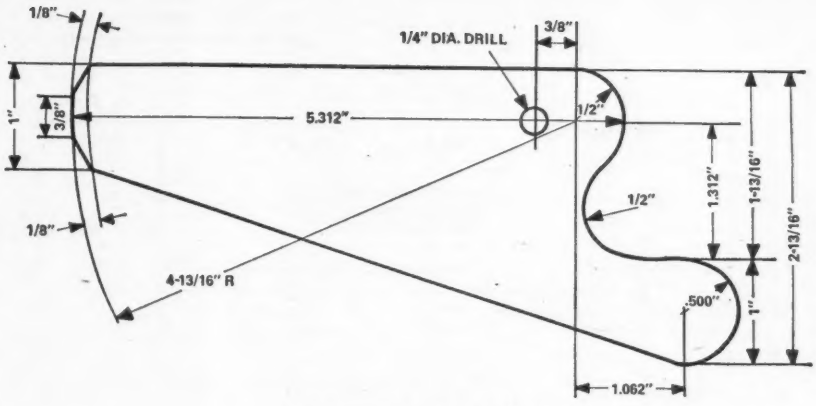
(c) Stamped with the appropriate markings.



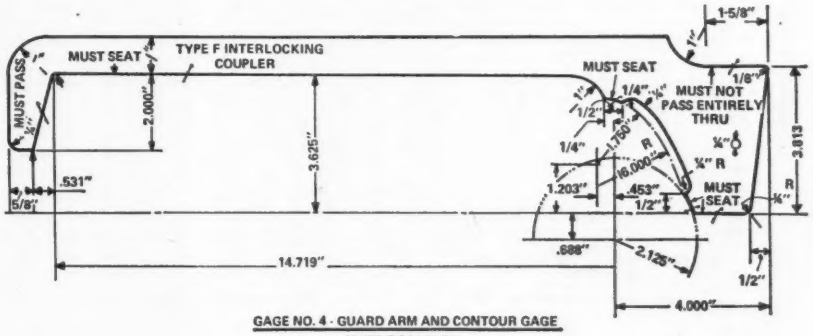
GAGE NO. 1 - WHEEL DEFECT GAGE
(A.A.R. GAGE NO. 34401)
MATERIAL: 3/32" STEEL PLATE-HARDENED; CADMIUM PLATED FINISH.



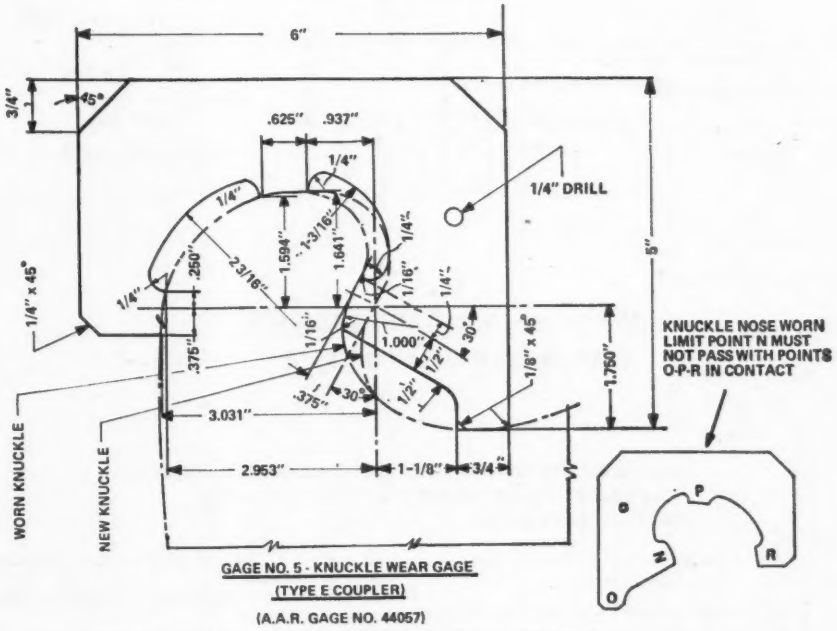
GAGE NO. 2 - SIMPLIFIED STEEL WHEEL GAGE
(A.A.R. GAGE - SIMPLIFIED WHEEL)
MATERIAL: 3/32" STEEL PLATE - HARDENED; CADMIUM FINISH.



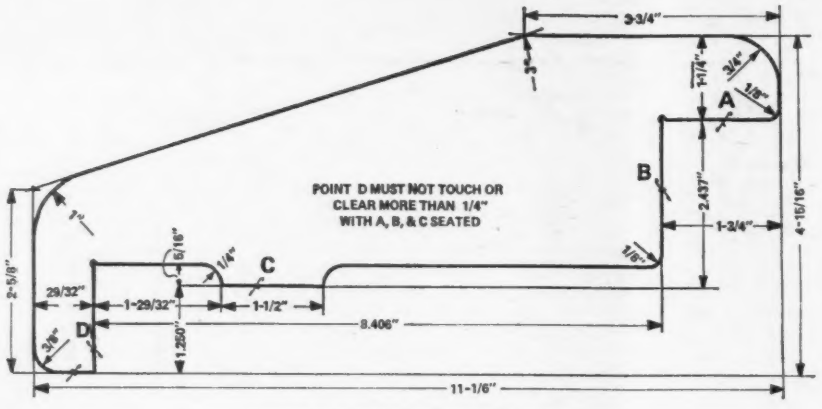
GAGE NO. 3 - GUARD ARM AND CONTOUR GAGE (TYPE E COUPLER)
(A.A.R. GAGE NO. 25623)
MATERIAL: 1/8" STEEL PLATE - HARDENED; CADMIUM PLATED FINISH



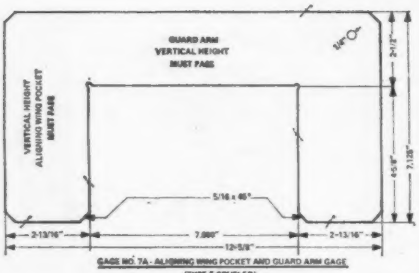
GAGE NO. 4 - GUARD ARM AND CONTOUR GAGE (TYPE F COUPLER)
(A.A.R. GAGE NO. 36527-2)
MATERIAL: 3/16" STEEL PLATE-HARDENED; CADMIUM PLATED FINISH.



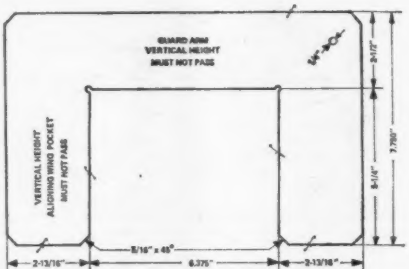
GAGE NO. 5 - KNUCKLE WEAR GAGE (TYPE E COUPLER)
(A.A.R. GAGE NO. 44057)
MATERIAL: 3/16" STEEL PLATE - HARDENED; CADMIUM PLATED FINISH.



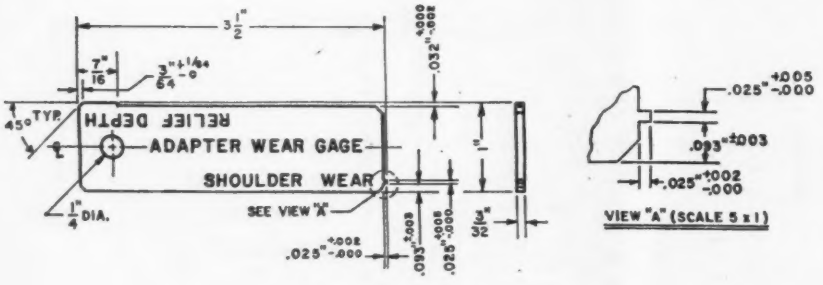
GAGE NO. 6 – KNUCKLE WEAR AND STRETCH GAGE
(TYPE F COUPLER)
(A.A.R. GAGE NO. 44250 - 3)
MATERIAL: 3/16" STEEL PLATE-HARDENED; CADMIUM PLATED FINISH.



GAGE NO. 7A - ALIGNING WING POCKET AND GUARD ARM GAGE
(TYPE F COUPLER)
(A.A.R. GAGE NO. 34101 - 4)
MATERIAL: 3/16" STEEL PLATE HARDENED, RUST PROOF FINISH.



GAGE NO. 7 B - ALIGNING WING POCKET AND GUARD ARM GAGE
(TYPE F COUPLER)
(A.A.R. GAGE NO. 44250 - 5)
MATERIAL: 3/16" STEEL PLATE - HARDENED; RUST PROOF FINISH.



GAGE No. 8 - ADAPTER WEAR GAGE (AAR ALTERNATE STANDARD)

MATERIAL: STEEL PLATE-HARDENED; CADMIUM PLATED FINISH.
TOLERANCE: +1/64"UNLESS OTHERWISE SPECIFIED.
BREAK SHARP CORNERS.

APPENDIX B—RAILROAD FREIGHT CAR COMPONENTS

I. List of components whose use is prohibited by this part.

A. *Air brakes:* The "K" type.

B. *Axles:* 1. Former AAR alternate standard tubular type.

2. Axle with letters "RJ" stamped on the end of the journal.

C. *Roller bearings:* 1. Nippon Sieko Kabushiki Kaish (NSK) size 6½" by 12" (marked "AAR 11").

2. Hyatt cylindrical bearing, all sizes (marked "AAR 2").

3. SKF "Piggybacker" spherical roller, size 6" by 11' (marked "AAR 7").

D. *Truck bolsters:* A bolster with one of the following pattern numbers listed according to manufacturer:

A.S.F	Dresser (Symington)	Birdsboro	Lenoir car works
21183–B	BO 5234	1458 1468	CS–184.
21183–N	BO 5263 BO 7076	1471	CS–611.
21648–C	BO 7076–A		
22056–E	BO 7115		

E. *Truck side frames:* A side frame with one of the following pattern numbers listed according to manufacturer:

A.S.F.	National castings	Buckeye	Dominion
7273	33793–1B	3–1776	TF–5100
7323		F–420	
21362 (cast prior to June 1941).			

Pittsburgh steel foundry	Scullin steel	Bettendorf	Canadian steel foundry
31673	42–CS–180	UT 456	26565
4–1862			
3–1674	4665		
4–2045	4770		
12897	4942		
12921	5220		
21263	5364		
	5364–C		
	5364–E		
	5811–A		
	5869–B		
	6577–A		

F. *Wheels:* 1. Cast iron wheel.

2. Cast steel wheel marked "AAR X–2."

3. Southern cast steel wheel manufactured before May 7, 1958.

4. Griffin, three-riser cast steel wheel, ball rim design, 70 ton capacity.

5. Griffin, three-riser cast steel wheel, two-wear, 70 and 50 ton capacity, 33 inch, (marked X–5 or CS–2).

II. List of components whose use is restricted by this part.

A. *Couplers:* 1. AAR type "D", top or bottom operated.

2. AAR type "E" with 5" by 7" shank.

B. *Draft arrangement:* 1. Miner FR–16 and FR–19–F draft gears.

2. Farlow draft attachment.

C. *Plain journal bearings:* Cartridge type.

D. *Trucks:* 1. Arch bar type.

2. Truck with cast steel pedestal side frame, short wheel base, and no bolster.

E. *Truck bolsters:* 1. Bolster cast before 1927.

2. Bolster without an identification mark or pattern number.

F. *Truck side frames:* 1. Side frame cast before 1927.

2. Side frame without an identification mark or pattern number.

3. Side frame with an "I", "T", or "L" section compression or tension member.

G. *Wheels:* 1. Wrought steel wheel manufactured before 1927, as indicated by marking on wheel.

2. Cast steel wheel marked AAR X–4.

3. Davis cast steel wheel.

H. *Yokes:* 1. Riveted type.

2. Keyless type.

3. Vertical key type.

APPENDIX C—STENCILING EXAMPLES

This appendix contains examples of stenciling required by § 215.11(c).

Example 1. In September 1980, a railroad operates a railroad freight car that was originally constructed in August 1958. It is a high utilization car, as defined by § 215.25(b), for which the Chessie System has records at its office in Baltimore, Maryland to show that the car traveled less than 25,000 miles in the preceding 12 months. The car has been reconditioned twice, the last time in July 1973, by the Best Forge and Foundry before it was released to the Penn Central. The car is equipped with plain bearing boxes with rear seals, box lid seals, and journal stops. The most recent lubrication under § 215.97 was performed by the Southern Pacific at its facility in Sacramento, California in June 1979.

§ 215.11(c), Clause	Stenciling			
(1)	BLT	8-58		
(2)	RCD	7-73	PC	BFF
(3)-(5)	RPKD-30	6-79	SP	SP
(6)	HU	C&O/B&O	BALTO	
(7)	(1)			

[1] No entry required under clause (7) because under § 215.25 a high utilization car for which mileage records are kept need not be inspected within 96 months after the car is reconditioned.

Example 2. In August 1980, a railroad operates a railroad freight car that was originally constructed in February 1978. It is a high utilization car; and its first inspection under § 215.25 was performed in February 1980 by the XYZ Corporation which is served solely by the Burlington Northern. The car is equipped with grease lubricated roller bearings with end caps that rotate; and the bearings were designed to be periodically lubricated.

§ 215.11(c), Clause	*Stenciling*
(1)	BLT 2-78
(2)	(1)
(3)-(5)	LUB-36 [2]
(6)	(3)
(7)	INSP, 2-80, BN, XYZ

[1] No entry required under clause (2) because car has not been reconditioned.

[2] No entry required under clause (5), next to "LUB-36", because under § 215.99 the roller bearings need not be lubricated within 36 months after car is originally constructed.

[3] No entry required under clause (6) because mileage records are not kept for this high utilization car.

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